

POSTAL RATE COMMISSION
Washington, DC 20268-0001

Ruth Y. Goldway
Commissioner

June 11, 2003

Mr. Richard T. Miller
Deputy Assistant Secretary, Global Issues
Bureau of International Organization Affairs
U.S. Department of State - Room 6323
2201 C Street, NW
Washington, DC 20520

Dear Mr. Miller,

Attached is a Technical Appendix explaining the Postal Rate Commission's position on the Joint Study on Article 43. Because of the low response rate of 3 percent, the survey results are highly unreliable. Therefore, the estimated net revenue losses based on the propensity to remail obtained from the survey are highly unreliable. The Commission believes that the study will not fare well under technical scrutiny and does not recommend that the study's results be used in support of any decision affecting the status of Article 43.

I believe it is important for this appendix to be included with and read alongside of the results of the mailer survey. If you have any questions, please contact Bob Cohen at 202-789-6850.

Thank you for the opportunity to comment.

Sincerely,

[signed]

Ruth Y. Goldway

Attachment

cc: Don Booth, U.S. Department of State
Michael Regan, U.S. Postal Service

TECHNICAL APPENDIX
MAILER SURVEY OF THE JOINT STUDY ON ARTICLE 43
OF THE UNIVERSAL POSTAL UNION CONVENTION

Purpose and conclusions of the study

The mailer survey was intended to provide estimates of (a) the extent to which major mailers would engage in ABA remail in the absence of Article 43, (b) the effects of specific liabilities associated with remail, and (c) the level of awareness of current UPU restrictions and the effectiveness of those restrictions in preventing remail.

About a third of the mailers in a "sample" of 415 major mailers indicated that they would engage in remail activity if Article 43 were eliminated, and within this group with a propensity to remail, 69 percent viewed this restriction as a strong deterrent to ABA remail. Moreover, data from the mailer survey were combined with various financial data to produce estimates of the financial impact of the elimination of Article 43.

The study's major problem

A salient problem that severely diminishes the quality of the results is the fact that the 415 survey respondents do not represent a sample from a probability sampling scheme. Rather, establishments from which data were generated comprised a limited number of sampling locations that happened to survive a data collection process that began with 13,942 eligible mailers. It is the result of the implementation of what was seemingly a self-selecting quota sampling design. The potential for nonsampling error in the associated results is very large, and the reliability of the derived estimates is extremely questionable at best.

The target population for the mailer survey is described as the population of mailers whose current or potential mail volume exceeds 300,000 pieces. The frame for the study was the subset of the target population that had access to the Internet and for whom valid telephone numbers existed. This population was grouped into eleven strata by mail type and volume. Efforts were made to contact and screen potential establishments and to encourage all the resultant population units or mailing locations within each stratum to participate in the survey. Survey instruments were carefully reviewed and pretested, and reminder calls were made to those locations that had agreed to participate in the survey but did not complete the web-based questionnaire in a timely manner.

The data collection process resulted in the completion of the survey questionnaire by a total (over all eleven strata) of 415 establishments. Weights were applied to the data from the 415 sample cases to reflect the fact that a subset of the target population responded to the survey, and to modify the preliminary weights to achieve consistency at the adjustment cell level with independent volume controls. These data formed the basis for the primary inference and analyses presented for the joint study.

Potential effects of nonsampling errors on survey estimates

The occurrence of survey errors is an inevitable aspect of the sample survey or market research process. The most frequently mentioned and perhaps the most tractable source of error is that ascribed to sampling. However, the magnitude of nonsampling error is often greater than that of sampling error, and two very important sources of nonsampling error in surveys are nonresponse and measurement error. It is well known that even estimates from surveys with reasonably large response rates can still have significant bias. Moreover, the smaller the response rate, the greater the likelihood of quite sizable nonresponse bias. Measurement error, which can be traced to the interviewer, respondent, questionnaire, or mode of interview can also result in biased estimates that could decrease the reliability of point and interval estimates of survey characteristics.

Despite seemingly diligent efforts to adhere to good data collection practices, the overall response rate for the mailer survey was three percent (415 of 13,942). To illustrate the potential for nonresponse to result in sizable bias in survey estimates, we again note that about one third of the survey respondents indicated some willingness to engage in remail activity in the absence of Article 43, and we will even assume that the response rate was five percent. The possible range for the percentage of nonrespondents with a propensity to remail is from 0 to 100 percent, which means that the corresponding possible range for the entire sample for this unweighted percentage is from 1.7 to 96.7 percent. An interval estimate for which there is such a large range is not very useful. While we may doubt that the level of potential remail for the sample nonrespondents of the mailer survey will approach the endpoints of the range given above, we are not able to provide a credible point estimate within this range or a meaningful smaller interval estimate.

Prominent in the weighting procedure for the mailer survey is the assumption of an ignorable response model. That is, there is an assumption that within the design strata the inaccessibility, unwillingness, inconvenience, and response delay that resulted in the exclusion of most of the units in the frame evolved from a completely random process. In

addition, there is an assumption that there is a strong relationship between the weighting cell characteristics and the propensity to remail, that supports the conclusion that within strata respondents and nonrespondents are very similar relative to remail propensity. The joint study has not provided any substantial arguments for the validity of these assumptions, and to the extent that they are flawed the survey weights for the sample respondents are inappropriate, which occasioned missing data bias.

Regarding measurement error, some consideration should be given to the potential for response error—disparity between the data obtained from survey respondents and the “true state of affairs.” Ideally one would like to conclude that it is reasonable to consider the response error insignificant. However, to assume erroneously that this source of nonsampling error can be ignored is to accept and convey an overstatement of the reliability of the survey results.

Potential effects of nonsampling errors on survey estimates

The Postal Rate Commission is unwilling to endorse any claims that the results from the mailer survey of the joint study on Article 43 are statistically defensible and can be used as a basis for inference for any population distinct from the 415 sample respondents. The survey’s extremely small response rate and the ostensible potential for measurement error preclude any credible assertions that the sample respondents are representative of a larger population from which they were selected.

Since the study has not provided adequate reliable information applicable to the targeted population, the Commission therefore questions the utility of its principal results relative to the expressed objectives of the joint study and does not recommend that they be used in support of any decision affecting the status of Article 43.